DERWENT-ACC-NO: 2005-034171

DERWENT-WEEK: 200504

TITLE: Radio frequency identification tag used in entry and exit management, personal identification, uses soft magnetic board as common core for two resonance circuit

PATENT-ASSIGNEE: MITSUBISHI MATERIALS CORP[MITV]

PRIORITY-DATA: 2003JP-0145619 (May 23, 2003)

PATENT-FAMILY:

PUB-NO	PUB-DATE	LANGUAGE	PAGES	MAIN-IPC
JP 2004348497 A	December 9, 2004	N/A	014	G06K 019/07

APPLICATION-DATA:

PUB-NO	APPL-DESCRIPTOR	APPL-NO	APPL-DATE
JP2004348497A	N/A	2003JP-0145619	May 23, 2003

INT-CL (IPC): G06K019/07, G06K019/077 , H01Q001/38 , H01Q007/06 , H04B005/02

ABSTRACTED-PUB-NO: JP2004348497A

BASIC-ABSTRACT:

NOVELTY - A resonance circuit (2) comprising coil (3) and integrated circuit (IC) (4) and a resonance circuit (5) comprising capacitor (7) and a coil (6), use a soft magnetic board (8) as a common core.

DETAILED DESCRIPTION - An INDEPENDENT CLAIM is also included for reader/writer antenna.

USE - For entry and exit management, personal identification, etc. Also, suits for antenna (claimed) of radio frequency identification (RFID) tag reader/writer. Also, applicable for other systems using loop antenna.

ADVANTAGE - The RFID tag is manufactured simply at low cost.

DESCRIPTION OF DRAWING(S) - The figure shows the structure of the antenna. (Drawing includes non-English language text).

resonance circuits 2,5

coil 3

integrated circuit 4

capacitor 7

metal plate 10

antenna coil 11

CHOSEN-DRAWING: Dwg.1/12

TITLE-TERMS: RADIO FREQUENCY IDENTIFY TAG ENTER EXIT MANAGEMENT PERSON IDENTIFY SOFT MAGNETIC BOARD COMMON CORE TWO RESONANCE CIRCUIT

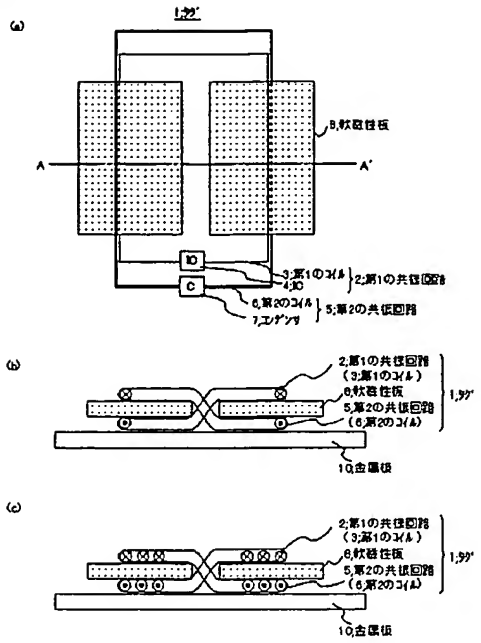
DERWENT-CLASS: T04 T05 W02

EPI-CODES: T04-K; T05-D01A; W02-B01A; W02-G05A;

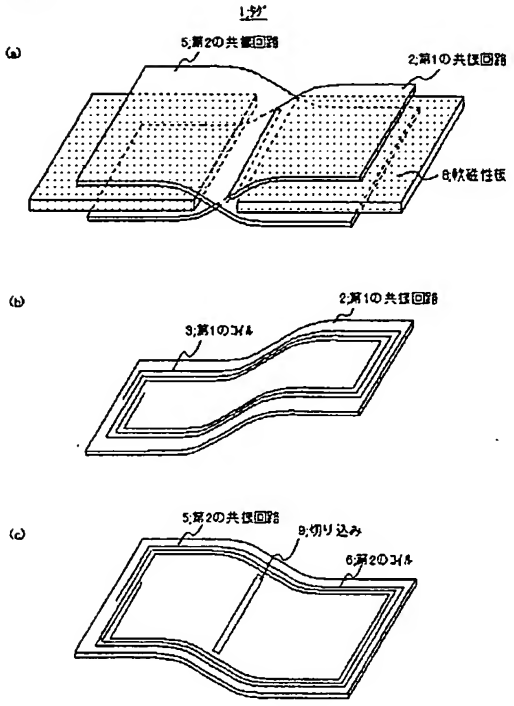
SECONDARY-ACC-NO:

Non-CPI Secondary Accession Numbers: N2005-029912

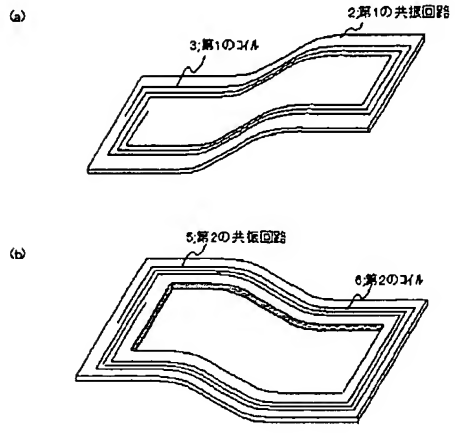
【図１】


(a)
1;ｼｰﾄﾞ
8;軟磁性板
A
A'
IC
C
3;第1のｺｲﾙ
4;IC
2;第1の共振回路
6;第2のｺｲﾙ
7;ｺﾝﾃﾞﾝｻ
5;第2の共振回路
(b)
2;第1の共振回路
(3;第1のｺｲﾙ)
8;軟磁性板
5;第2の共振回路
(6;第2のｺｲﾙ)
1;ｼｰﾄﾞ
10;金属板
(c)
2;第1の共振回路
(3;第1のｺｲﾙ)
8;軟磁性板
5;第2の共振回路
(6;第2のｺｲﾙ)
1;ｼｰﾄﾞ
10;金属板

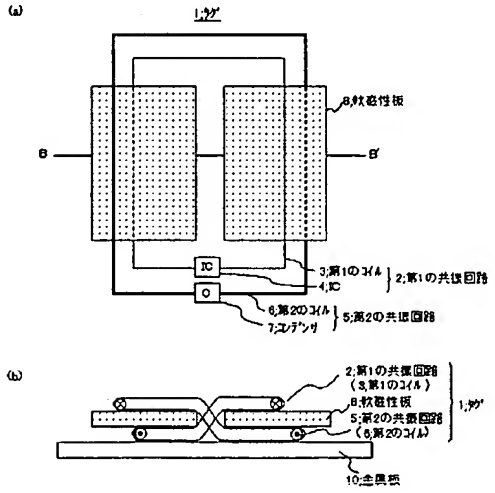
【図２】


1;ｼｰﾄﾞ
(a)
5;第2の共振回路
2;第1の共振回路
8;軟磁性板
(b)
2;第1の共振回路
3;第1のｺｲﾙ
(c)
5;第2の共振回路
9;切り込み
6;第2のｺｲﾙ

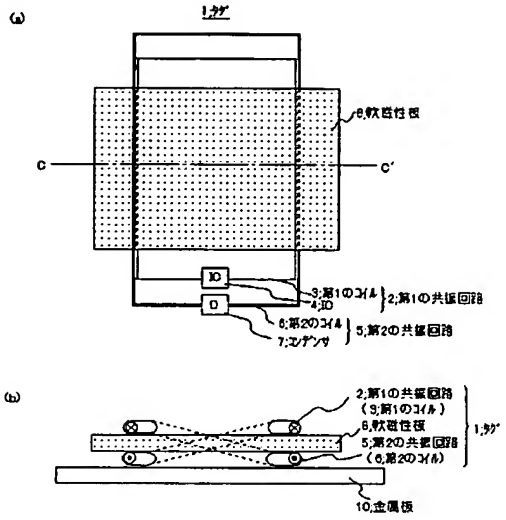
【図３】


(a)
2;第1の共振回路
3;第1のｺｲﾙ
(b)
5;第2の共振回路
6;第2のｺｲﾙ

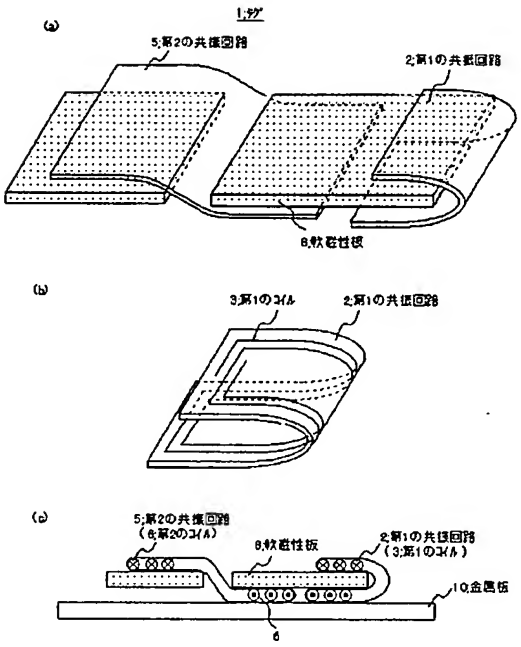
【図４】


(a)
1;ｼｰﾄﾞ
8;軟磁性板
B
B'
IC
C
3;第1のｺｲﾙ
4;IC
2;第1の共振回路
6;第2のｺｲﾙ
7;ｺﾝﾃﾞﾝｻ
5;第2の共振回路
(b)
2;第1の共振回路
(3;第1のｺｲﾙ)
8;軟磁性板
5;第2の共振回路
(6;第2のｺｲﾙ)
1;ｼｰﾄﾞ
10;金属板

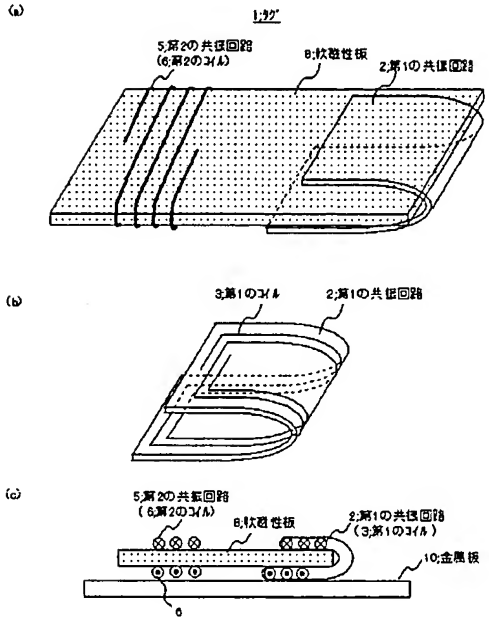
【図５】


(a)
1;ﾀｸﾞ
8;軟磁性板
C
C'
IC
D
3;第1のｺｲﾙ
4;IC
2;第1の共振回路
6;第2のｺｲﾙ
7;ｺﾝﾃﾞﾝｻ
5;第2の共振回路
(b)
2;第1の共振回路
(3;第1のｺｲﾙ)
8;軟磁性板
5;第2の共振回路
(6;第2のｺｲﾙ)
1;ﾀｸﾞ
10;金属板

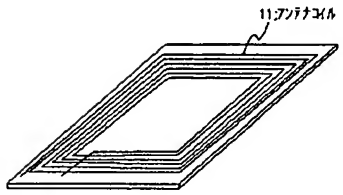
【図６】


(a)
1;ﾀｸﾞ
5;第2の共振回路
2;第1の共振回路
8;軟磁性板
(b)
3;第1のｺｲﾙ
2;第1の共振回路
(c)
5;第2の共振回路
(6;第2のｺｲﾙ)
8;軟磁性板
2;第1の共振回路
(3;第1のｺｲﾙ)
10;金属板
6

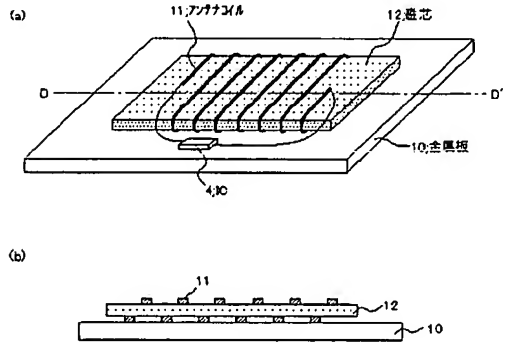
【図７】


(a)
1;ﾀｸﾞ
5;第2の共振回路
(6;第2のｺｲﾙ)
8;軟磁性板
2;第1の共振回路
(b)
3;第1のｺｲﾙ
2;第1の共振回路
(c)
5;第2の共振回路
(6;第2のｺｲﾙ)
8;軟磁性板
2;第1の共振回路
(3;第1のｺｲﾙ)
10;金属板
6

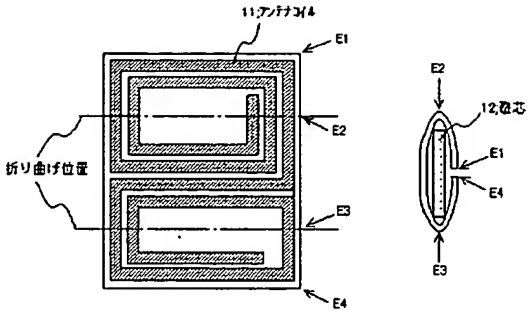
【図８】


11;ｱﾝﾃﾅｺｲﾙ

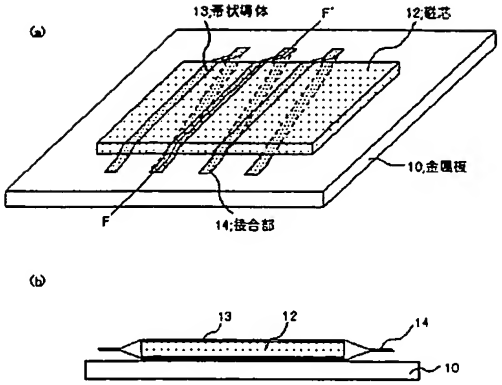
【図９】


(a)
11;ｱﾝﾃﾅｺｲﾙ
12;磁芯
D
D'
10;金属板
4;IC
(b)
11
12
10

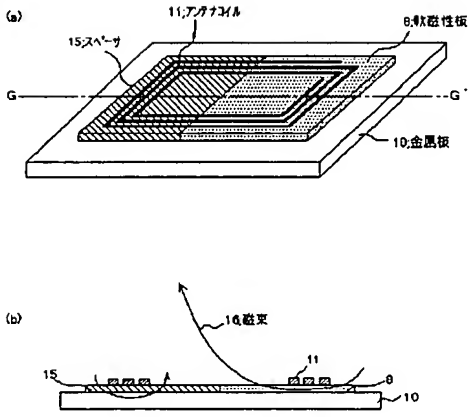
【図１０】


11;アンテナコイル
E1
E2
E3
E4
折り曲げ位置
12;磁芯

【図１１】


(a)
13;帯状導体
F'
12;磁芯
10;金属板
F
14;接合部
(b)
13
12
14
10

【図１２】


(a)
11;アンテナコイル
8;軟磁性板
15;スペーサ
G
G'
10;金属板
(b)
16;磁束
11
15
8
10

フロントページの続き

Fターム(参考) 5J046 AA09 AA19 AB11 PA01 PA06 PA09
5K012 AB05 AC06 AC08 AC10 BA02